W claim:

1. A method of reducing the sulfur content of a catalytically cracked petroleum fraction, which comprises catalytically cracking a petroleum feed fraction containing organosulfur compounds at elevated temperature in the presence of a cracking catalyst and a product sulfur reduction catalyst which comprises a porous molecular sieve having (i) a first metal component which is within the interior pore structure of the molecular sieve and which comprises a metal in an oxidation state greater than zero and (ii) a second metal component which is within the interior pore structure of the molecular sieve and which comprises at least one rare earth, to produce liquid cracking products of reduced sulfur content.

2. A method according to claim 1 in which the product sulfur reduction catalyst comprises a large pore size or intermediate pore size zeolite as the molecular sieve component and, as the first metal component, at least one metal of Period 3, Groups 5, 8, 9 or 12 of the Periodic Table.

3. A method according to claim 2 in which the large pore size zeolite comprises zeolite USY.

4. A method according to claim 2 in which the first metal component comprises vanadium.

5. A method according to claim 2 in which the second metal component comprises lanthanum alone or in combination with cerium.

6. A method according to claim 1 in which the second metal component is present in an amount from 1 to 10 weight percent of the catalytic composition.

7. A method according to claim 1 in which the product sulfur reduction catalyst comprises a USY zeolite having a UCS of from 2.420 to 2.455 nm, a bulk silica:alumina ratio of at least 5.0 as the molecular sieve component and, as the first metal component, at least one of zinc or vanadium in an oxidation state greater than zero and, as the second metal component, a combination of lanthanum and cerium.

8. A method according to claim 1 in which the sulfur reduction catalyst is a separate particle additive catalyst.

9. In a fluid catalytic cracking process in which a heavy hydrocarbon feed comprising organosulfur compounds is catalytically cracked to lighter products by contact in a cyclic catalyst recirculation cracking process with a circulating fluidizable catalytic cracking catalyst inventory consisting of particles having a size ranging from about 20 to about 100 microns, comprising:

(i) catalytically cracking the feed in a catalytic cracking zone operating at catalytic cracking conditions by contacting feed with a source of regenerated cracking catalyst to produce a cracking zone effluent comprising cracked products and spent catalyst containing coke and strippable hydrocarbons;

(ii) discharging and separating the effluent mixture into a cracked product rich vapor phase and a solids rich phase comprising spent catalyst;

(iii) removing the vapor phase as a product and fractionating the vapor to form liquid cracking products including gasoline,

(iv) stripping the solids rich spent catalyst phase to remove occluded hydrocarbons from the catalyst,

(v) transporting stripped catalyst from the stripper to a catalyst regenerator;

(vi) regenerating stripped catalyst by contact with oxygen containing gas to produce regenerated catalyst; and

(vii) recycling the regenerated catalyst to the cracking zone to contact further quantities of heavy hydrocarbon feed,

the improvement which comprises

reducing the sulfur content of a the gasoline portion of the liquid cracking products, by catalytically cracking the feed fraction at elevated temperature in the presence of a product sulfur reduction catalyst which comprises a porous molecular sieve having (i) a first metal component which is within the interior pore structure of the molecular sieve and which comprises a metal in an oxidation state greater than zero and (ii) a second metal component which is within the interior pore structure of the molecular sieve and which comprises at least one rare earth.

10. A method according to claim 11 in which the cracking catalyst comprises a matrixed faujasite zeolite.

11. A method according to claim 12 in which the product sulfur reduction catalyst comprises a large pore size or intermediate pore size zeolite as the molecular siev component, vanadium as the first metal component and a combination of cerium and at least one other rare earth metal as the second metal component.

12. A method according to claim 13 in which the large pore size zeolite of the product sulfur reduction catalyst comprises zeolite USY.

13. A catalytic composition which comprises (i) a porous molecular sieve component, (ii) a first metal component comprising a metal in an oxidation state greater than zero located within the interior pore structure of the porous molecualr sieve component and (ii) a second metal component comprising a rare earth metal located within the interior pore structure of the porous molecular sieve component.

14. A catalytic composition according to claim 13 in which the porous molecular sieve component comprises a porous hydrocarbon cracking sieve component.

15. A catalytic composition according to claim 14 in which the porous molecular sieve component comprises zeolite USY having a UCS of from 2.420 to 2.455 nm and a bulk silica:alumina ratio of at least 5.0.

16. A catalytic composition according to claim 15 in which the porous molecular sieve component comprises zeolite USY having a UCS of from 2.420 to 2.435 nm and a bulk silica:alumina ratio of at least 5.0.

17. A catalytic composition according to claim 13 which contains from 0.2 to 5 weight percent vanadium as the first metal component, based on the weight of the zeolite, of the first metal component.

18. A catalytic composition according to claim 13 which comprises as the second metal component, a combination of cerium and at least one other rare earth.

19. A catalytic composition according to claim 13 in which the metal components have has been introduced into the zeolite as exchanged cationic species within the zeolite pores.

20. A catalytic composition according to claim 13 which is formulated as a fluidizable catalytic cracking product sulfur reduction catalyst additive having a particle size of from 20 to 100 microns, for reducing the sulfur content of a catalytically cracked gasoline fraction during the catalytic cracking process.

21. A catalytic composition according to claim 13 which is formulated as an integrated fluidizable catalytic cracking/product sulfur reduction catalyst for cracking a heavy hydrocarbon feed to produce liquid cracking products including gasoline and reducing the sulfur content of the catalytically cracked gasoline fraction during the catalytic cracking process, which comprises fluidizable particles having a size ranging from about 20 to about 100 microns of a hydrocarbon cracking component which comprises a zeolitic molecular sieve which contains the first metal component located within the pore structure of the zeolite and the second metal component.

22. An integrated fluidizable catalytic cracking/product sulfur reduction catalyst according to claim 21 which contains from 0.1 to 5 weight percent, based on the weight of the zeolite, of vanadium as the first metal component.

23. An integrated fluidizable catalytic cracking product sulfur reduction catalyst according to claim 21 in which the second metal component comprises a combination of cerium and at least one other rare earth in an amount from 1 to 5 weight percent of the catalyst.

24. An integrated fluidizable catalytic cracking product sulfur reduction catalyst according to claim 21 in which the zeolitic molecular sieve comprises zeolite USY having a UCS of from 2.420 to 2.455 nm and a bulk silica:alumina ratio of at least 5.0.

25. A fluidizable catalytic cracking product sulfur reduction catalyst composition according to claim 24 in which the porous molecular sieve component comprises

zeolite USY having a UCS of from 2.420 to 2.435 nm and a bulk silica:alumina ratio of at least 5.0.